

INSTRUCTION BOOK

MODELS *JA1522*
JA1518

IMPORTANT SAFETY INSTRUCTIONS

Your sewing machine is designed and constructed only for HOUSEHOLD use. Read all instruction before using this sewing machine.

DANGER — To reduce the risk of electric shock:

1. An appliance should never be left unattended when plugged in. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
2. Always unplug before relamping. Replace bulb with same type rated 15 Watts.
3. Do not reach for the appliance that has fallen into water. Unplug immediately.
4. Do not place or store appliance where it can fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid.

WARNING — To reduce the risk of burns, fire, electric shock, or injury to persons.

1. Do not allow to be used as a toy. Close attention is necessary when this appliance is used by or near children.
2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.

4. Never operate the appliance with any air opening blocked. Keep ventilation openings of the sewing machine and foot controller free from accumulation of lint, dust, and loose cloth.
5. Never drop or insert any object into any opening.
6. Do not use outdoors.
7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
8. To disconnect, turn all controls to the off ("O") position, then remove plug from outlet.
9. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
10. Keep fingers away from all moving parts. Special care is required around the sewing machine needle.
11. Always use the proper needle plate. The wrong plate can cause the needle to break.
12. Do not use bent needles.
13. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
14. Switch the sewing machine off ("O") when making any adjustment in the needle area, such as threading needle, changing needle, threading bobbin, or changing presser foot, and the like.
15. Always unplug the sewing machine from the electrical outlet when removing covers, lubricating, or when making any other user servicing adjustments mentioned in the instruction manual.

SAVE THESE INSTRUCTIONS

Do's and Don'ts

1. Always be aware of the up-and-down movement of the needle and do not turn your attention from the machine while it is running.
2. When leaving the sewing machine unattended, the main switch of the machine must be switched off or the plug must be removed from the socket-outlet.
3. When servicing the sewing machine, or when removing covers or changing lamps, the machine or the electrical set must be disconnected from the supply by removing the plug from the socket-outlet.
4. Do not place anything on the foot control, otherwise the machine will start inadvertently, or the control or motor may burn out.
5. The maximum permissible power for the sewing lamp bulb is 15 watts.
6. When using your sewing machine for the first time, place a piece of waste fabric under the presser foot and run the machine without thread for a few minutes. Wipe away any oil which may have appeared.

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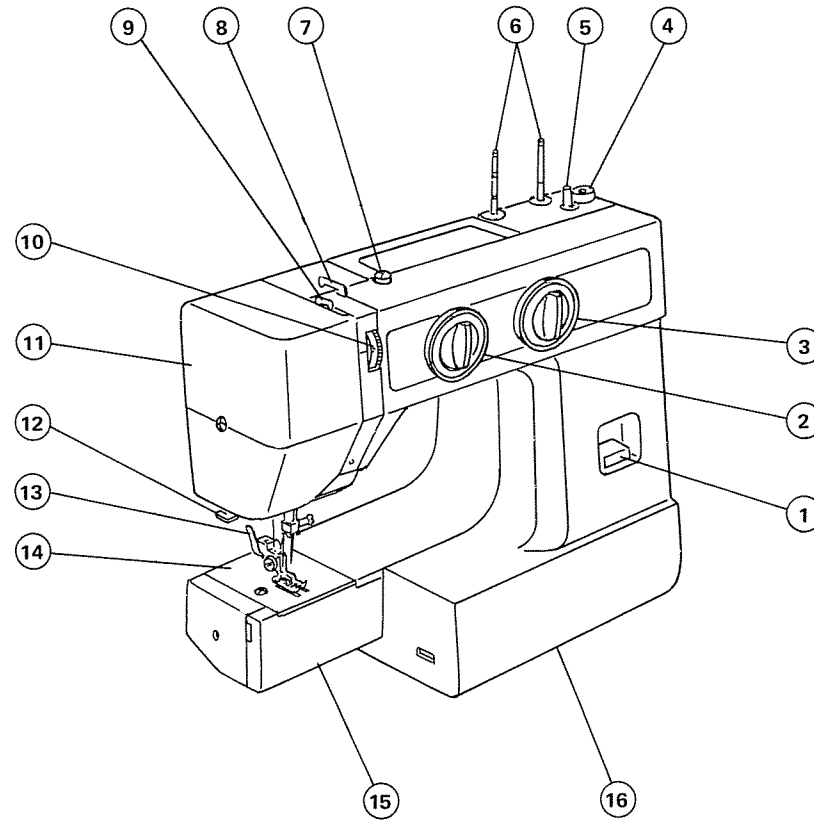
SECTION VI CARE OF YOUR MACHINE

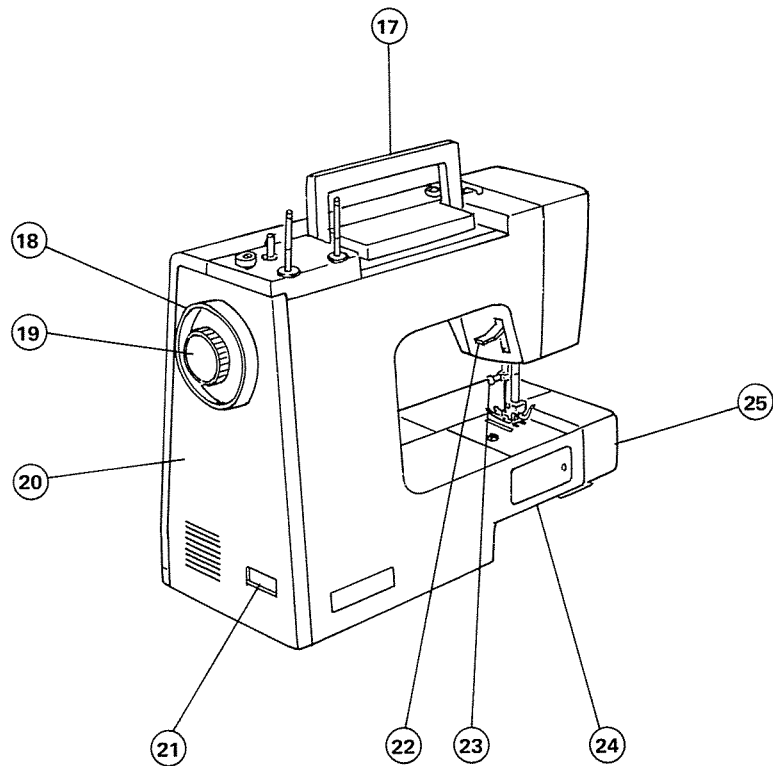
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ESSENTIAL PARTS

Names of Parts

- 1 Reverse stitch button
- 2 Pattern selector dial
- 3 Stitch length dial
- 4 Bobbin winder stopper
- 5 Bobbin winder spindle
- 6 Spool pins
- 7 Bobbin winder thread guide
- 8 Thread guide
- 9 Thread take-up lever
- 10 Thread tension dial
- 11 Face plate
- 12 Thread cutter
- 13 Presser foot holder
- 14 Needle plate
- 15 Hook cover
- 16 Front cover

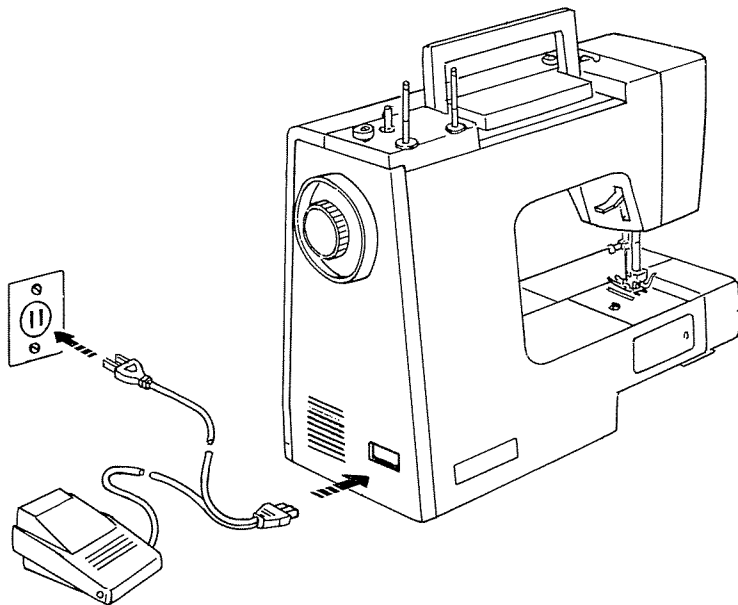




- 17 Carrying handle
- 18 Balance wheel
- 19 Auto clutch knob
- 20 Belt cover
- 21 Cord socket
- 22 Presser foot lifter
- 23 Needle clamp screw
- 24 Free arm
- 25 Extension table
(Accessory Storage Box)

GETTING READY TO SEW

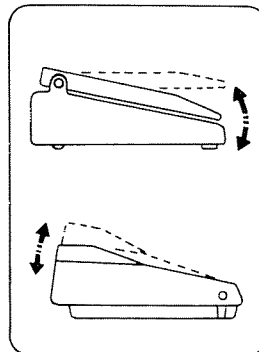
Connecting the Machine to the Power Supply



Before connecting the power, make sure the voltage and frequency of your electrical power conform to the machine.

Fit the nonreversible plug into the cord socket and plug the machine in to the power supply.

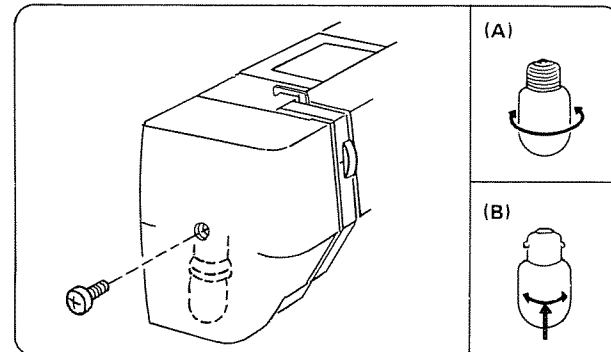
Foot Control



Sewing speed can be varied by the foot control.

The harder you press on the control, the faster the machine runs.

Sewing Light



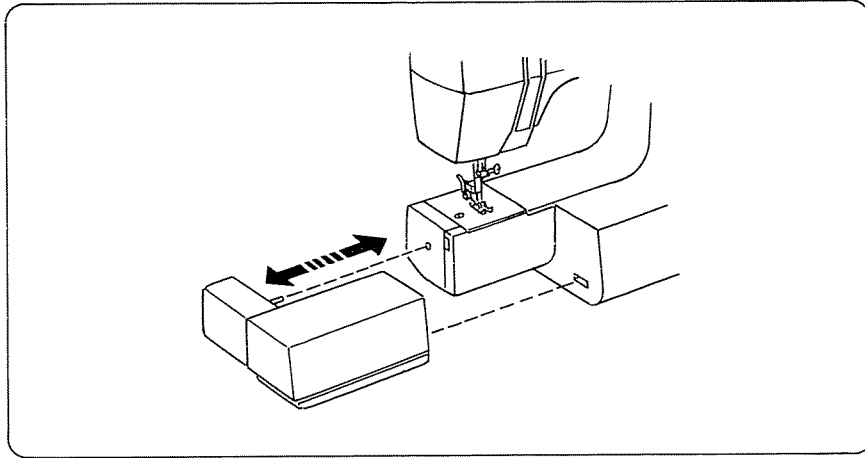
The sewing light is located behind the face plate. Turn the screw counter-clockwise and remove the face plate.

- (A)
- To remove Turn to the left.
 - To replace Turn to the right.
- (B)
- To remove Push and twist to the left.
 - To replace Push and twist to the right.

Extension Table (Accessory Storage Box)

Extension Table

The extension table provides added sewing surface and can be easily removed for free arm sewing.



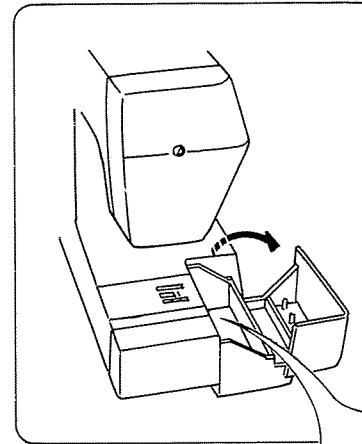
For free arm sewing

Pull the end of the extension table away from the machine, as illustrated.

For attaching the table

Push the extension table until its lugs fit into the machine.

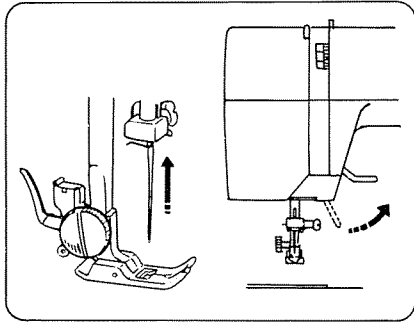
Accessory Storage Box



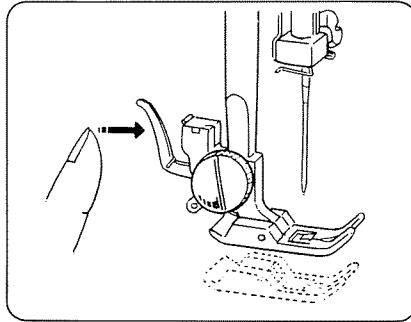
- Sewing accessories are conveniently stored under the extension table.

To Snap On and Snap Off the Presser Foot

To snap off

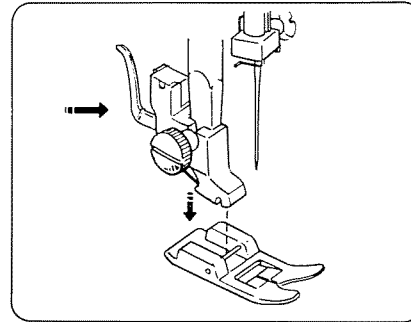


Turn the balance wheel toward you to raise the needle to its highest position. Raise the presser foot.



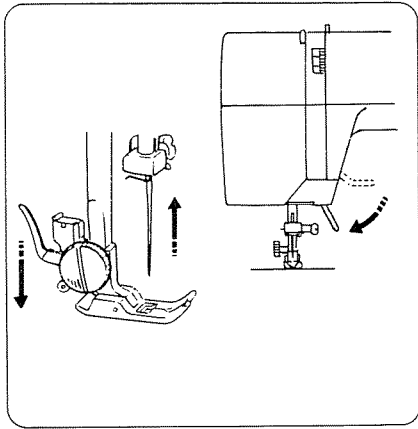
Press the lever on the back of the foot holder. The presser foot will drop off.

To snap on

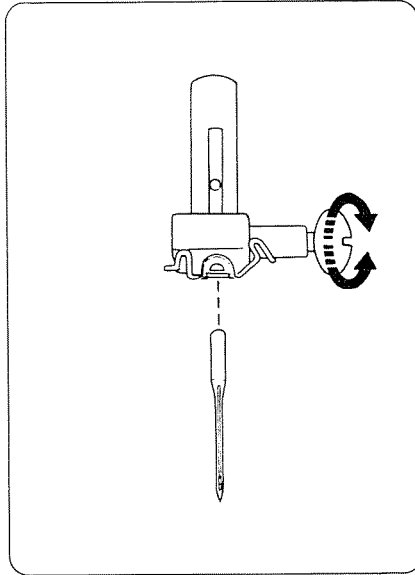


Place the presser foot so the pin on the foot lies just under the groove of the foot holder. Lower the foot holder to lock the foot in place.

Changing Needles



Raise the needle by turning the balance wheel toward you and lower the presser foot.



Loosen the needle clamp screw by turning it counter-clockwise.

Remove the needle from the clamp.

Insert the new needle into the needle clamp with the flat side away from you.

When inserting the needle into the clamp, push it up as far as it will go and tighten the clamp screw firmly with the screwdriver.

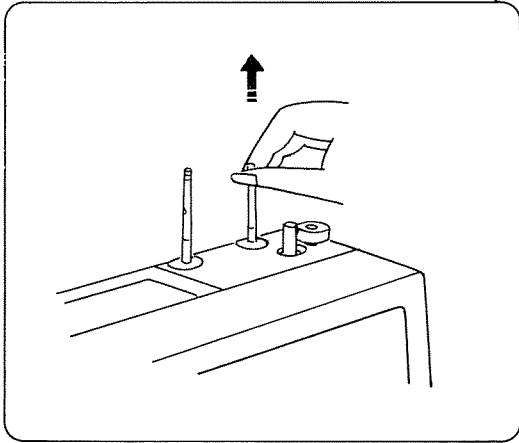
* Check your needles frequently for barbed or blunted points. Snags and runs in knits, fine silks and silk-like fabrics are permanent and are almost always caused by a damaged needle.

Thread and Needle Chart

	Fabrics	Threads	Needle Size
Light weight	Crepe de Chine, Voile, Lawn, Organdy, Georgette, Tricot	Fine Silk Fine Cotton Fine Synthetic Fine Cotton Covered Polyester	9 or 11
Medium weight	Linens, Cotton, Pique, Serge, Double Knits, Percale	50 silk 50 to 80 Cotton 50 to 60 Synthetic Cotton Covered Polyester	11 or 14
Heavy weight	Denim, Tweed, Gabardine, Coating, Drapery and Upholstery Fabric	50 silk 40 to 50 Cotton 40 to 50 Synthetic Cotton Covered Polyester	14 or 16

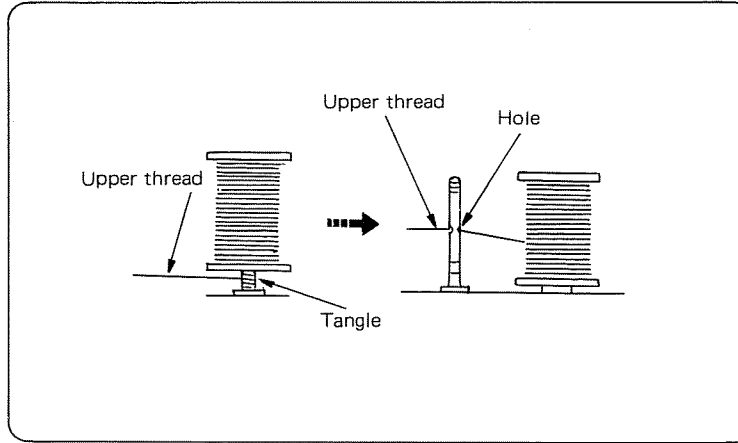
- In general, fine threads and needles are used for sewing thin fabrics, and thicker threads and needles are used for sewing heavy fabrics. Always test thread and needle size on a small piece of fabric which will be used for actual sewing.
- Use the same thread for needle and bobbin.
- When sewing stretch, very fine fabrics and synthetics, use a BLUE TIPPED needle. The blue tipped needle effectively prevents skipped stitches.
- When sewing very fine fabrics, sew over a piece of paper to prevent yarn distortion.

Setting Spool Pins



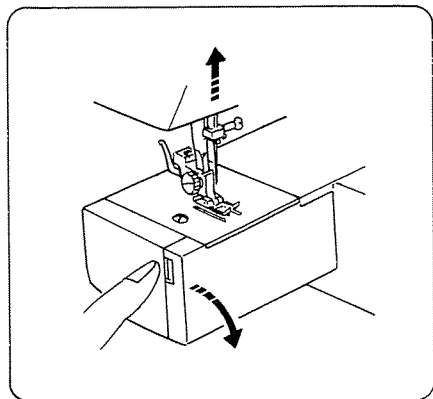
The spool pins are used for holding the spool of thread in order to feed thread to the machine.

To use, pull up the spool pin. Push down for storage.

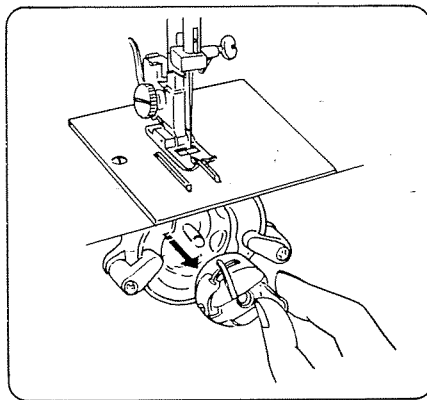


NOTE: In case of using the thread which has tendency to tangle around the spool pin, thread through the hole of spool pin as shown. The hole should face to the thread spool.

Removing or Inserting the Bobbin Case

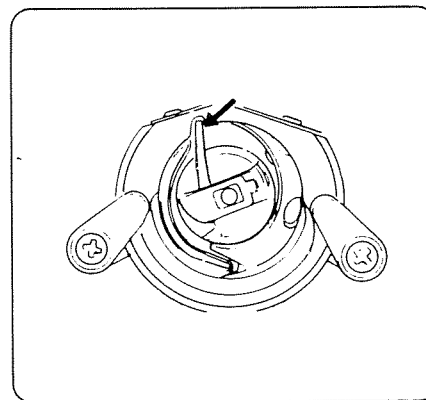


Open the hook cover.



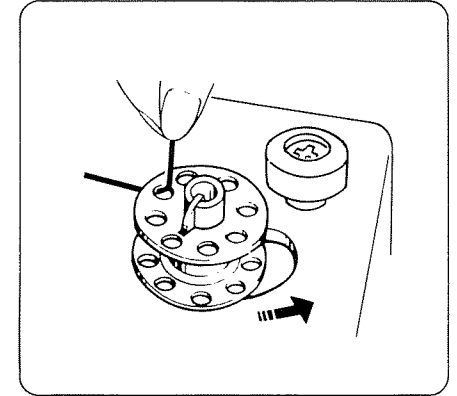
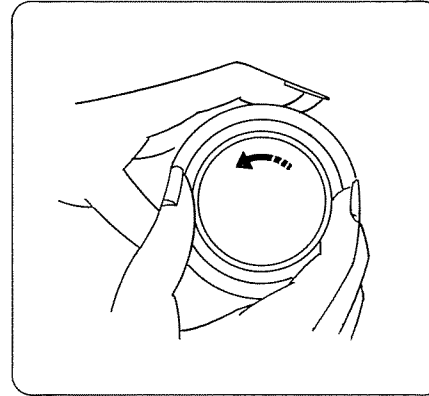
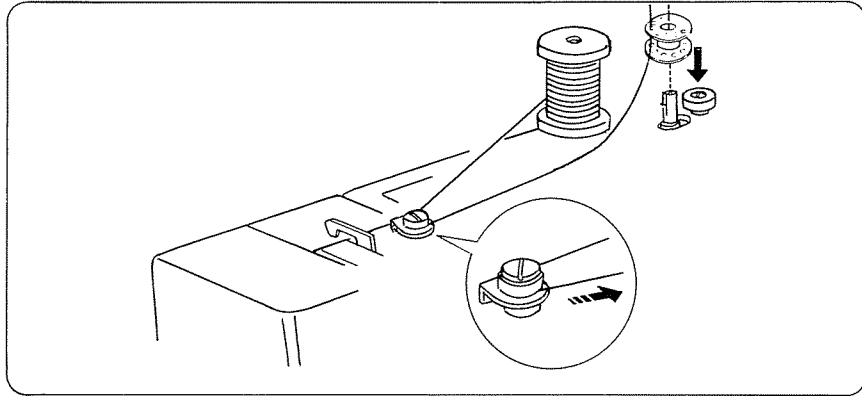
Raise the needle by turning the balance wheel toward you.

Take out the bobbin case by holding the latch.



When inserting the bobbin case, place the horn into the recess of the hook race.

Winding the Bobbin



Draw the thread from spool. Guide the thread around the bobbin winder thread guide.

Insert the thread through one of the holes in the bobbin from the inside to the outside.

Put the bobbin on the bobbin winder spindle, and push it to the right.

While holding the balance wheel with your left hand, turn the clutch knob counter-clockwise with your right hand.

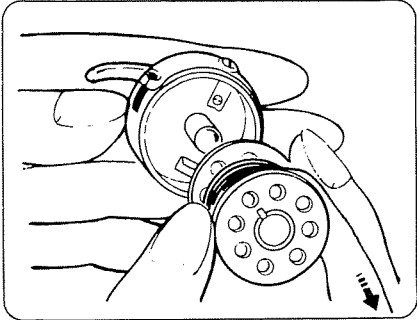
With the free end of the thread held in your hand, depress the foot control. Stop the machine when it has made a few turns, and cut the thread close to the hole in the bobbin. Depress the foot control again.

When the bobbin is fully wound, it will stop automatically.

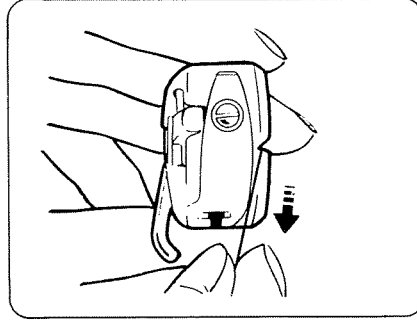
Return the bobbin winder to its original position by moving the spindle to the left, and cut the thread.

Turn the clutch knob clockwise.

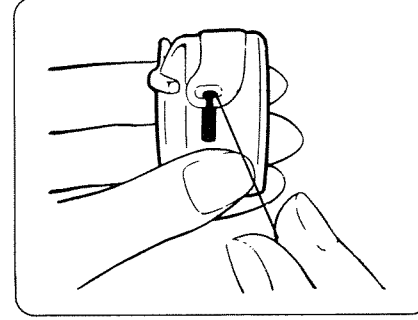
Threading Bobbin Case



- 1 Place the bobbin into the bobbin case. Make sure the thread unwinds in the direction of arrow.



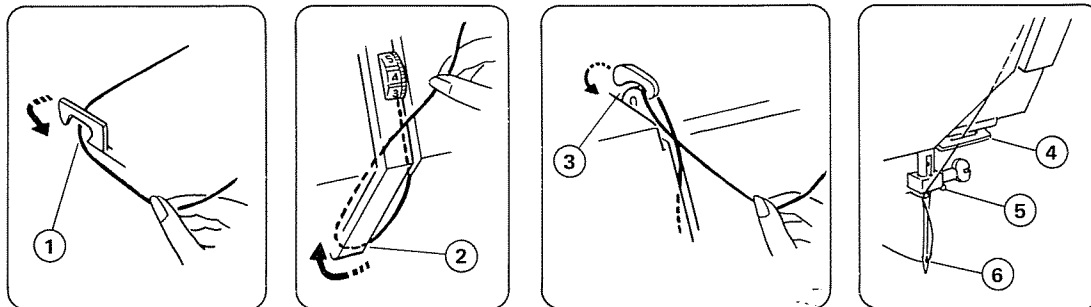
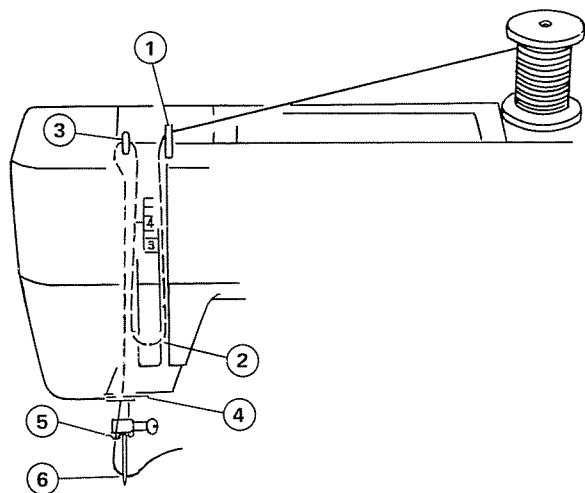
- 2 Pull the thread into the bobbin case slot.



- 3 Draw the thread under the tension spring and into the delivery eye.

* Leave about 10 cm (4 inches) of free thread.

Threading the Machine



Raise take-up lever to its highest position by turning balance wheel toward you.

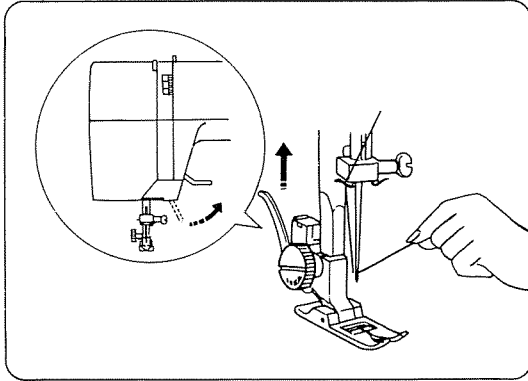
Raise presser foot.

Place spool on spool pin as shown, with thread coming from the back of the spool.

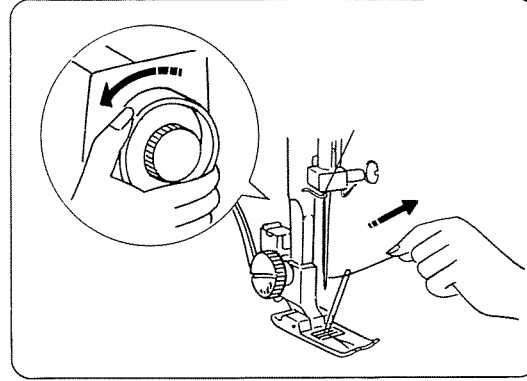
1. Draw thread into thread guide using both hands.
2. While holding thread near spool, draw thread down into the tension area and then around the check spring holder.
3. Firmly draw thread up and through take-up lever from right to left.
4. Then draw thread down and slip it into the lower thread guide.
5. Draw thread down and slip it into needle bar thread guide.
6. Thread needle eye from front to back.

NOTE: You may want to cut the end of thread with sharp scissors for easier needle threading.

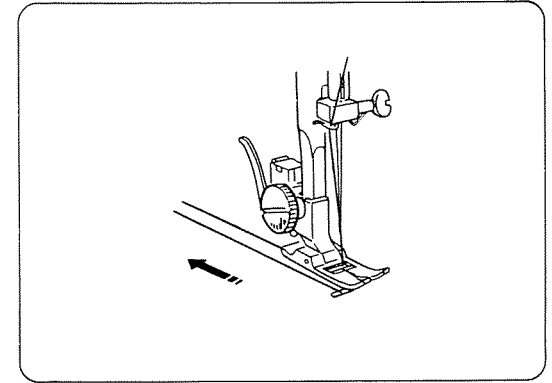
Drawing Up Bobbin Thread



- ① Raise the presser foot and hold the needle thread lightly with your left hand.

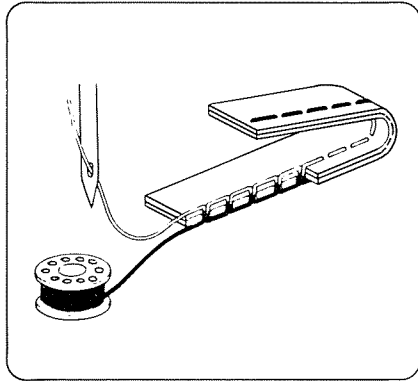


- ② Turn the balance wheel slowly towards you with your right hand until the needle goes down and continue turning the balance wheel until the take-up lever is at its highest position. Lightly draw up the needle thread forming a loop of the bobbin thread.

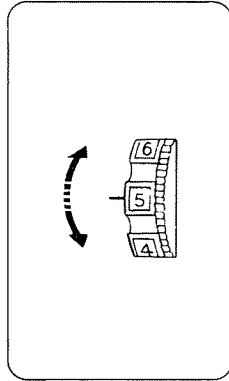


- ③ Pull 15 cm (6") of both threads back and under the presser foot.

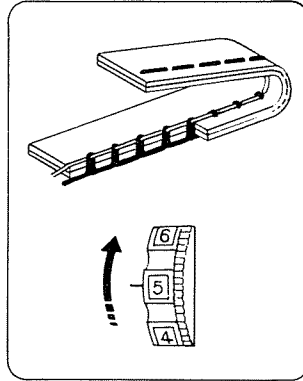
Balancing Needle Thread Tension



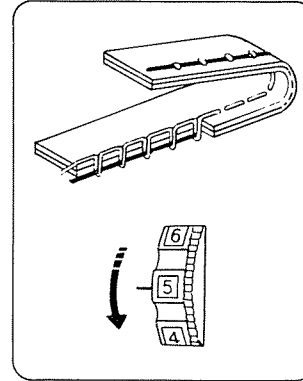
The needle thread and the bobbin thread should interlock in the center of two layers of fabric in straight seams.



Set the desired number of the thread tension dial at setting mark.

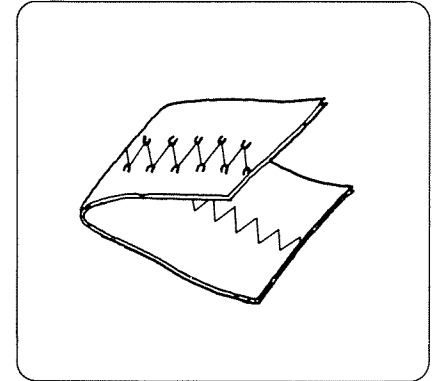


Loosen the needle thread tension by moving the dial to a lower number.



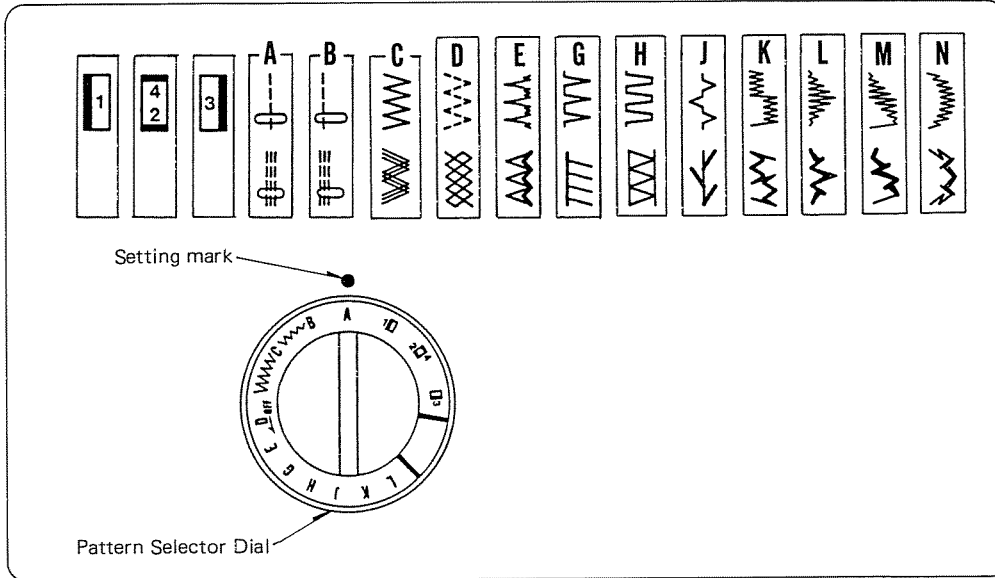
Tighten the needle thread tension by moving the dial to a higher number.

Thread Tension for Zigzag Sewing

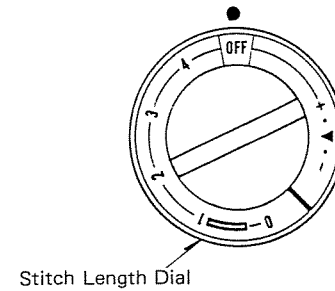


To obtain better zigzag stitches, the upper tension should be slightly weaker than in the case of straight sewing. The upper thread should appear slightly on the reverse side of the fabric.

Pattern Selector Dial



(Illustration A)



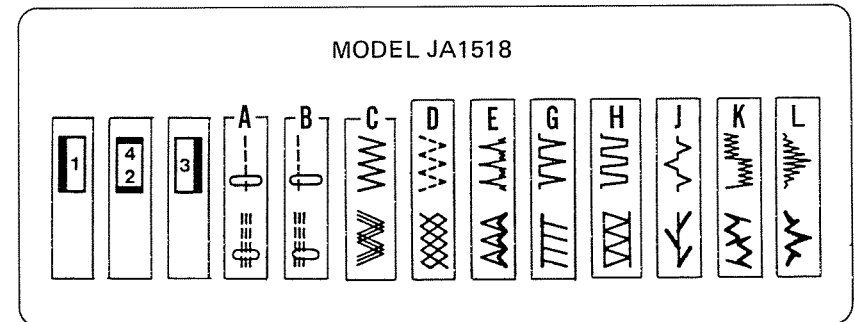
OFF position . . . When you select the patterns D to N, first, select this position.

Raise the needle above the fabrics and select the desired pattern at the setting mark by turning the pattern selector dial.

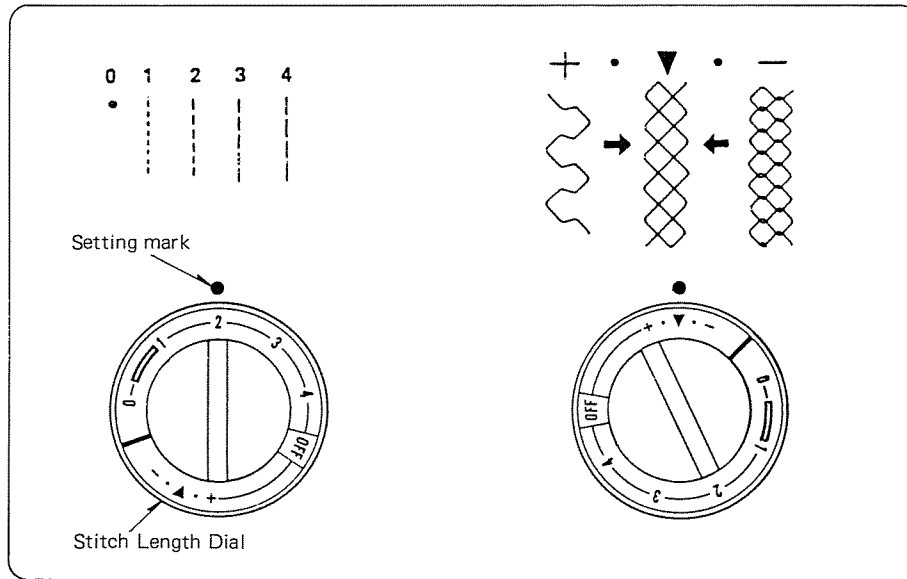
When you select patterns D to N.

- First, turn the stitch length dial to OFF position (Illustration A).
- Then, select the desired pattern at the setting mark by turning the pattern selector dial.
- Turn back stitch length control to desired stitch length or " ▼ " position.

Note: Don not turn the pattern selector dial while the needle is in the lower position. It may cause the needle to break.



Stitch Length Dial



The higher the number, the longer the stitch length. You can select the suitable stitch length for most fabrics.

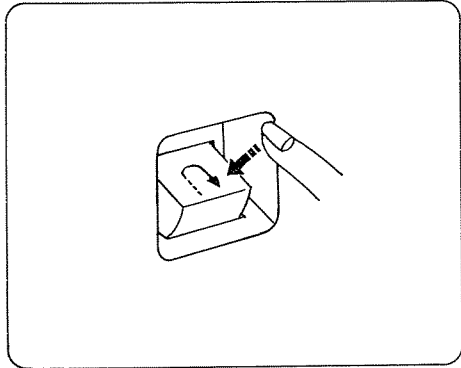
Selecting Stretch Stitch Patterns

When sewing stretch stitch, set the stitch length dial at “ ▼ ”. When forward and reverse feeds become unbalanced depending upon the type of fabric, correct the balance as follows:

When patterns are compressed, correct it by turning the dial toward “+”.

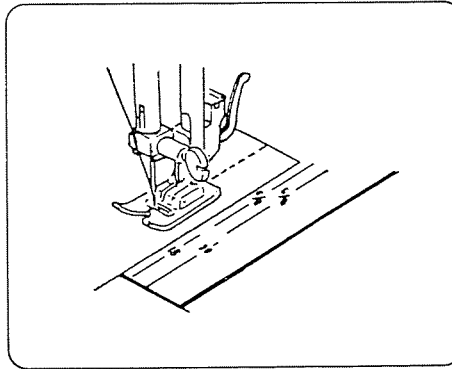
When patterns are drawn out, correct it by turning the dial toward “-”.

Reverse Stitch Button



As long as you keep the reverse stitch button depressed, the machine sews backwards.

Seam Guide Line

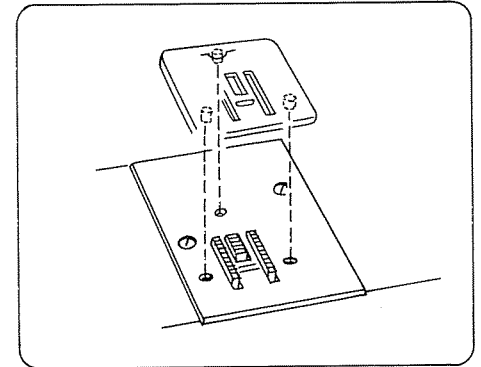


The numbers on the needle plate indicate the distance between the center needle position and the line.

The numbers in the front indicate in millimeters.

The numbers in the back indicate in inches.

Darning Plate

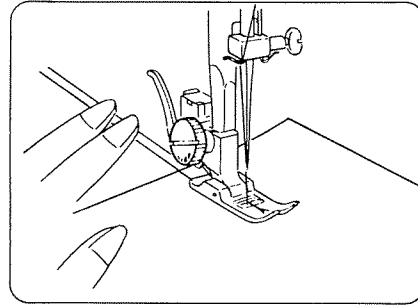
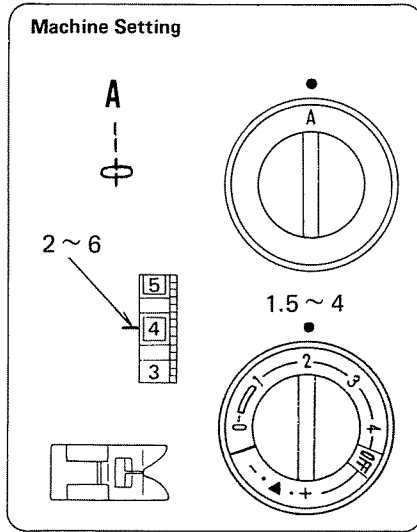


To Put on the Darning Plate:

1. Position the darning plate with the 3 pins on the bottom
2. Fit the darning plate pins into the needle plate holes. The feed dogs will show through the darning plate holes.

BASIC SEWING

Straight Stitch Sewing

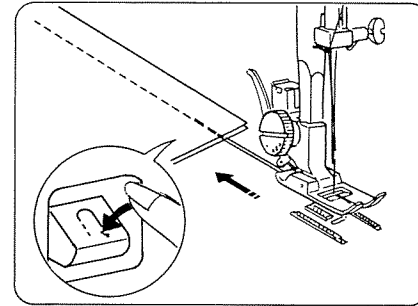


Raise the presser foot and position the fabric next to a stitching guide line on the needle plate.

Lower the needle into the fabric.

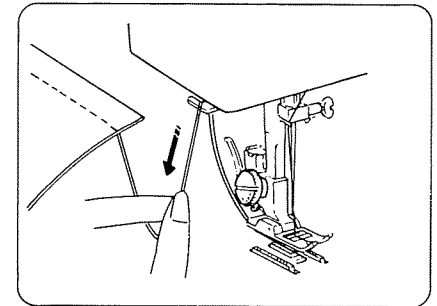
Lower the presser foot and smooth the threads toward the back. Depress the foot control.

Gently guide the fabric along the guide line letting the fabric feed by itself.



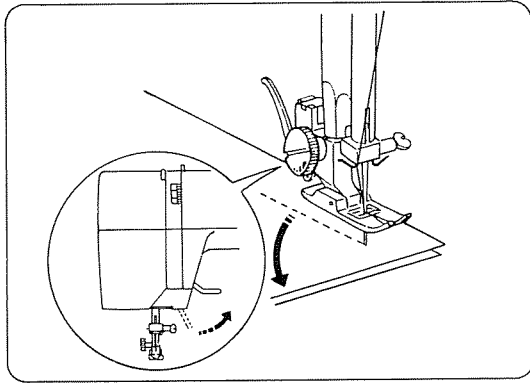
For fastening the ends of seams, press the reverse stitch button and sew several reverse stitches.

Raise the presser foot and remove the fabric, drawing the threads to the back.



The threads are cut the proper length for starting the next seam.

To Change the Sewing Directions

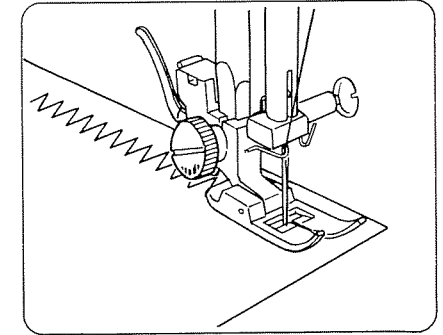
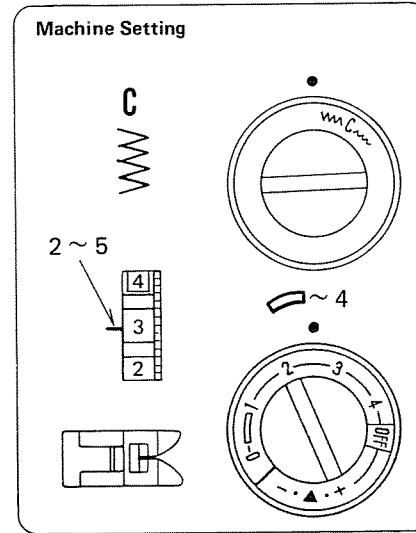


Stop the machine and turn the balance wheel toward you to bring the needle down into the fabric.

Raise the presser foot.

Pivot the fabric around the needle to change sewing direction as desired. Lower the presser foot and continue sewing.

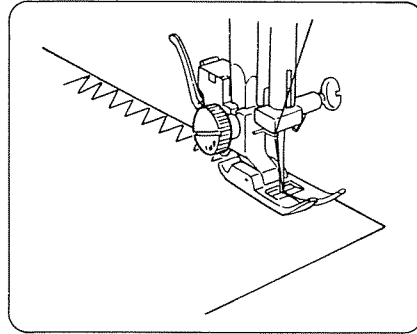
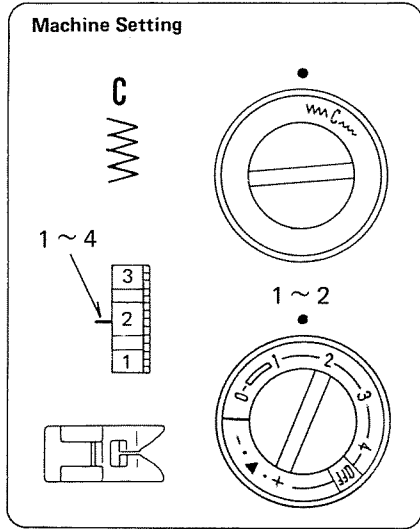
Zigzag Stitching



Simple zigzag stitching is widely used for overcasting, sewing on buttons etc.

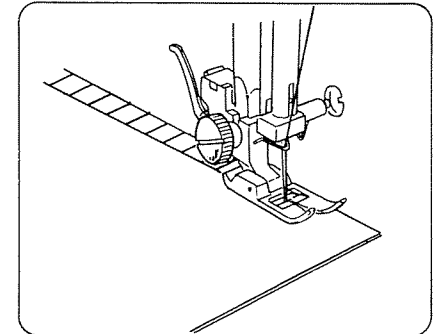
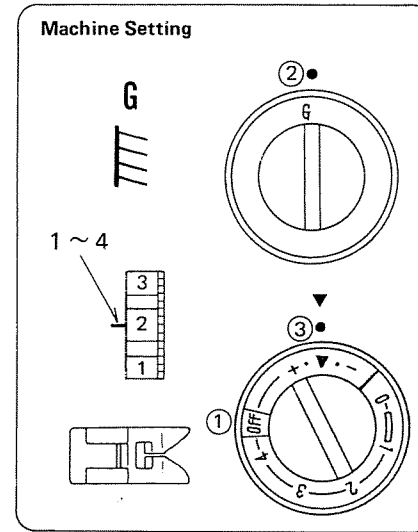
UTILITY STITCHING

Overcasting



This type of stitch is used on the seam allowance to prevent fabrics from fraying at raw edges.

Overedge Stitch

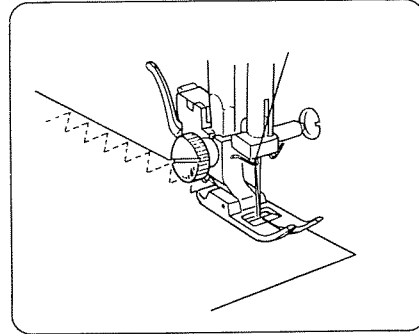
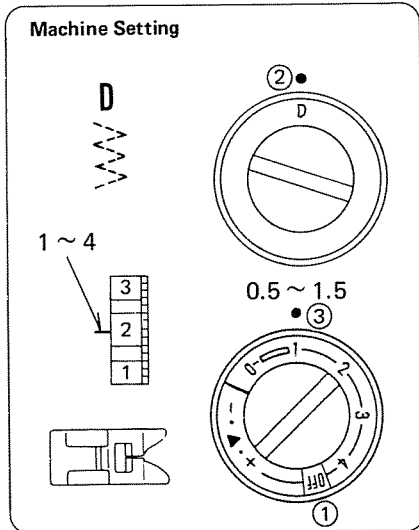


Overedge stitch will be done most successfully when the right sides stitches of zigzag fall slightly off the edges of the fabrics.

Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial G
- ③ : Stitch length dial ▼

Tricot Stitch

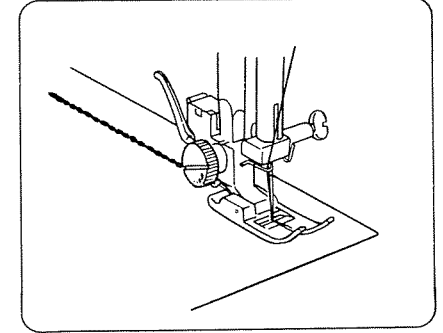
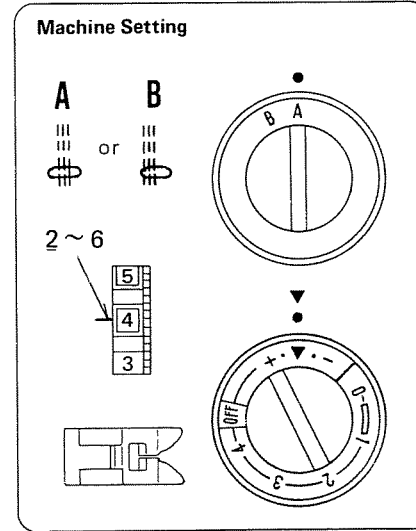


Place the fabric under the presser foot so that the edge will be slightly inside the right hand side of the presser foot. Guide the work so the right hand stitches fall at the edge of the fabric.

Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial D
- ③ : Stitch length dial . . 0.5 ~ 1.5

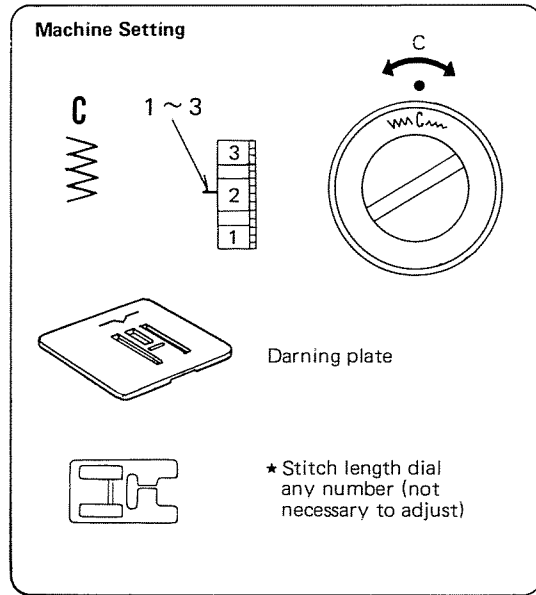
Triple Strength Stitch



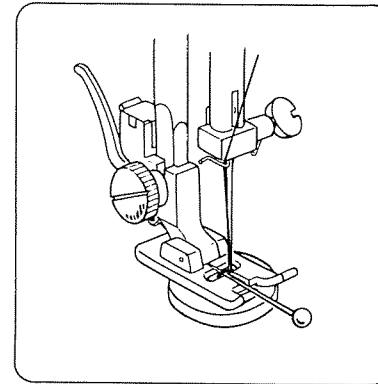
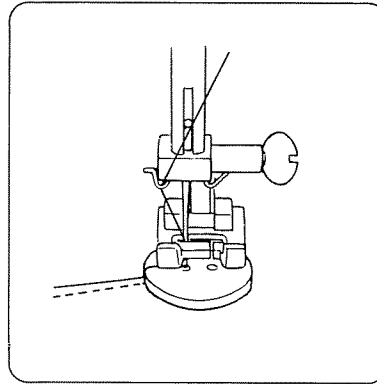
The stitch is sewn with two stitches forward and one stitch backward forming a seam that does not rip easily.

Garments should be basted for fitting before seaming.



Sewing Buttons

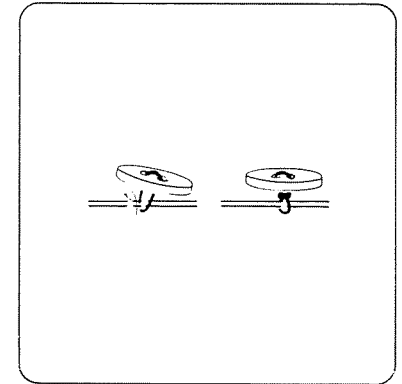


Use the darning plate for button sewing.
(See Page 18).



A pin can be placed on top of the foot to form a shank.

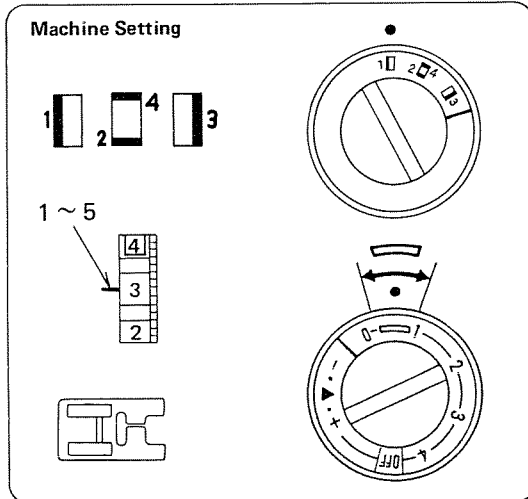
Set the pattern selector at "  ". Align the both holes of the button with the slot of the foot and place the left hole of the button just below the needle point. Lower the foot and turn the pattern selector until the needle point comes just above the right hole of the button. Sew about five stitches and raise needle. Set the pattern selector at "  " again and sew a few stitches to lock thread.



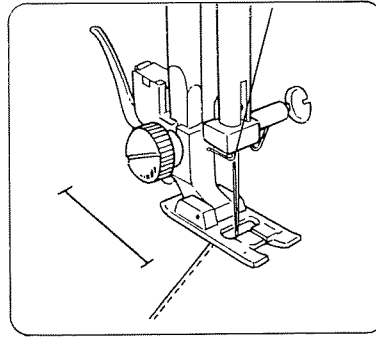
To strengthen the shank, cut the threads leaving a 20 cm (8") tail. Bring the needle thread down through the hole in the button and wind it around the shank.

Draw the thread to the wrong side and knot.

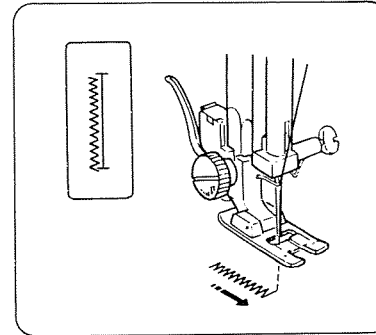
Buttonhole Stitching



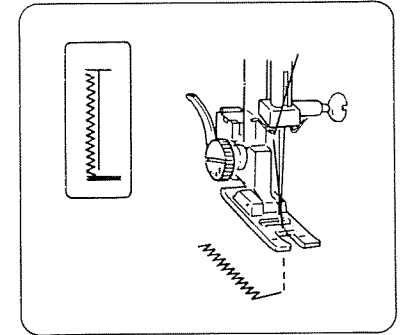
Make a test buttonhole and a sample duplicating the fabric, interfacing and seams of the actual garment. Place the button on the fabric sample and mark the top and bottom to determine the buttonhole length.



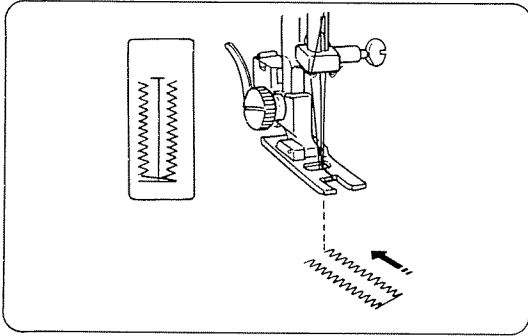
Set the pattern selector dial at "1". Slide both threads to the left. Lower the needle into the garment where the buttonhole is to start, and lower the foot.



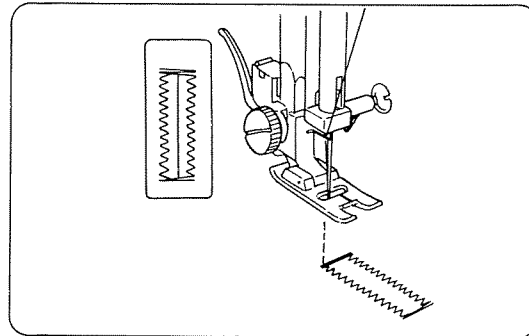
Sew down the left side stopping at the bottom mark. Raise the needle.



Set the pattern selector dial at "2", sew 5 stitches of bartack and raise the needle from the fabric.

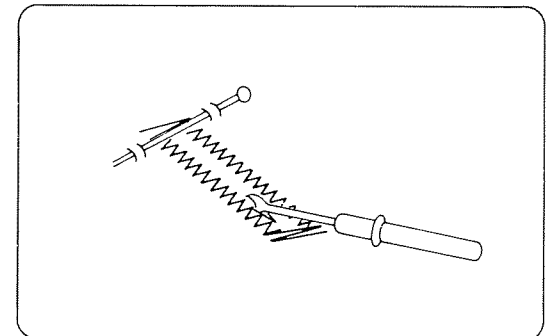


Set the pattern selector dial at " 3 ".
Sew up the right side of the buttonhole. Stop the machine when you are directly opposite the first stitch on the left hand side and raise the needle.



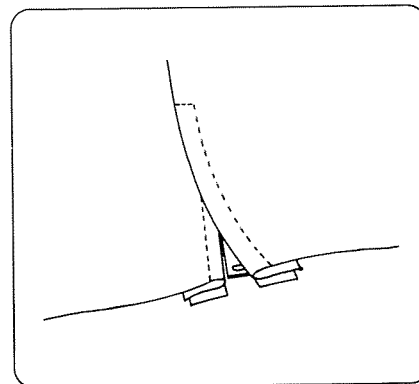
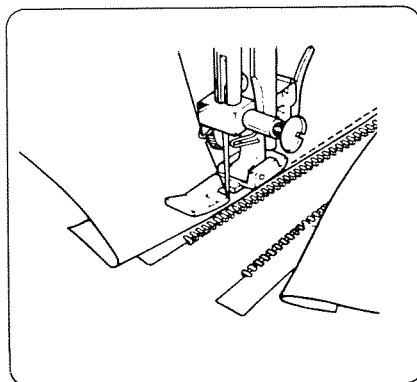
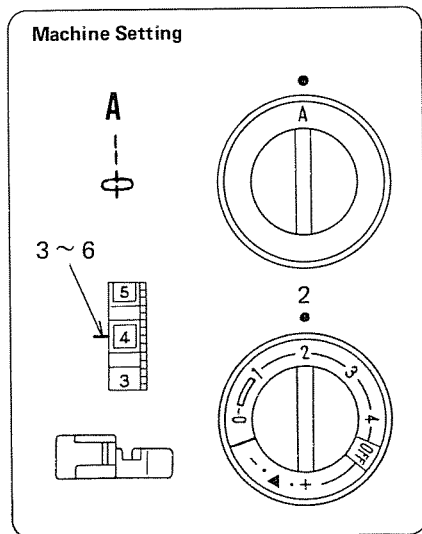
Set the pattern selector dial at " 4 ".
Sew a few bartacks and raise the needle from the fabric.

Set the stitch length dial to "0" and the pattern selector dial at straight stitch sewing. Sew a few locking stitches.



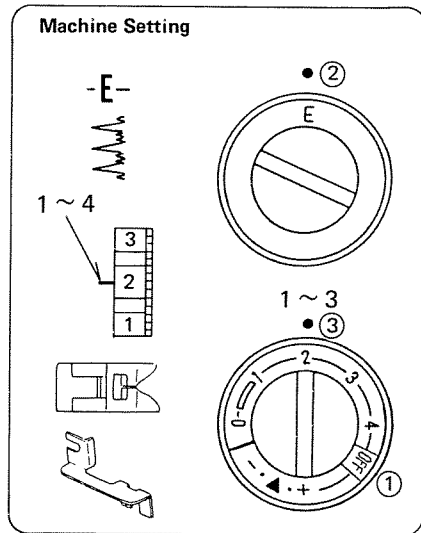
Remove the fabric from the machine and cut the sewing threads.
Insert a pin inside the bartack.
Then cut the opening with a seam ripper.
Take care not to cut the stitches.

Zipper Application



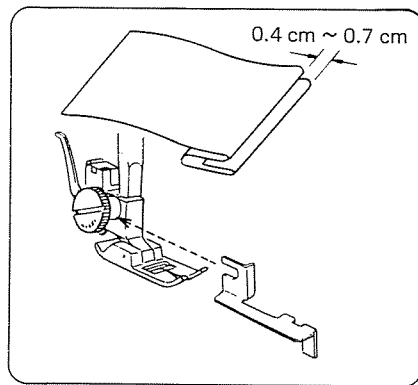
Pin or baste zipper tape to fabric and place it under the foot.
Smooth the threads toward the back and lower the foot.
To sew left side of the zipper, guide the edge of the zipper along the zipper teeth and stitch through garment and zipper tape.
Turn the fabric and sew the other side of the zipper in the same way as you did on the left side of the zipper.

Blind Stitch Hemming



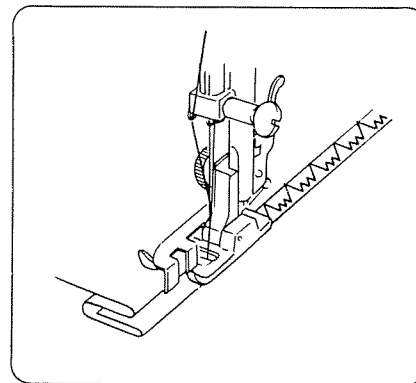
Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial E
- ③ : Stitch length dial 1~3



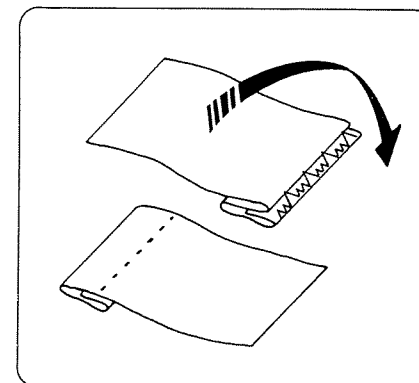
Fold up the fabric as illustrated.

Lower the presser foot, then loosen the foot holder screw to place the hem guide between the screw and the shank of foot holder. Tighten the screw making sure the wall of hem guide is placed in the middle of the toes of the presser foot.



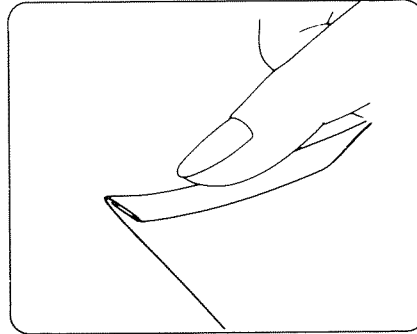
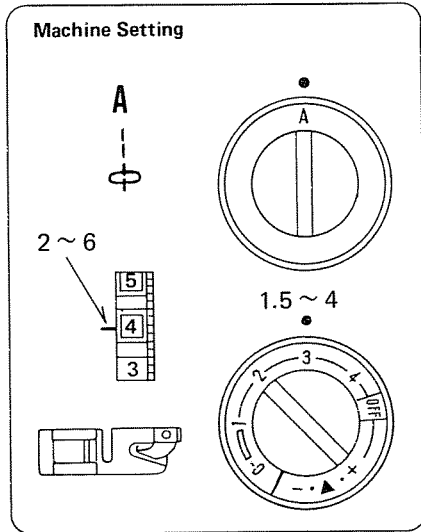
Raise the presser foot and place the fabric under the foot so that the soft fold rests against the wall of hem guide.

Lower the foot, then stitch slowly for better control so that the zigzag stitches fall on the hem allowance and pierce the soft fold. While sewing, make sure the soft fold runs along the wall of hem guide.

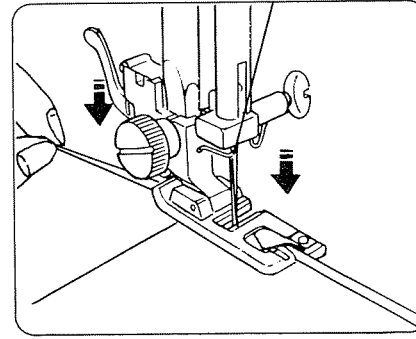


Spread the fabric flat with the right side facing up.

Rolled Hem

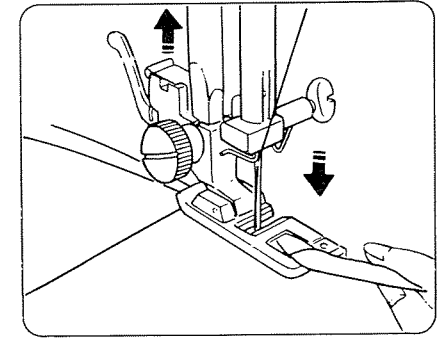


Make a double 0.25 cm (1/8") fold approximately 8 cm (3") in length.



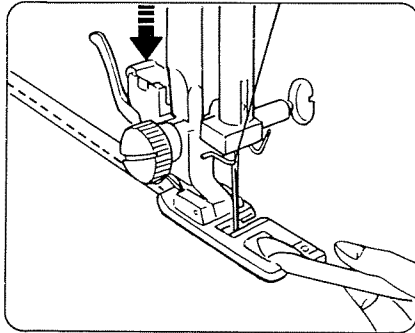
Lower the needle into the fabric at the point where sewing is to begin, then lower the hemmer foot.

Sew 3 or 4 stitches while holding the needle and bobbin threads.

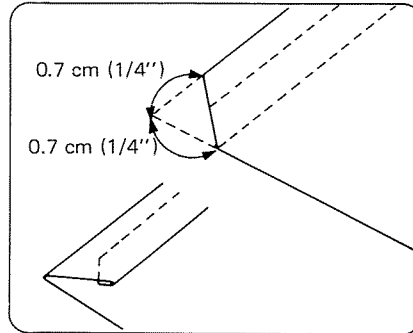


Lower the needle into the fabric and lift the hemmer foot. Insert the folded portion of the fabric into the curl of the hemmer foot.

Shell Tuck



Lower the hemmer foot, then sew by lifting up the edge of the fabric to keep it feeding smoothly and evenly.



Trim about 0.7 cm (1/4") from corners as illustrated, to reduce bulk.

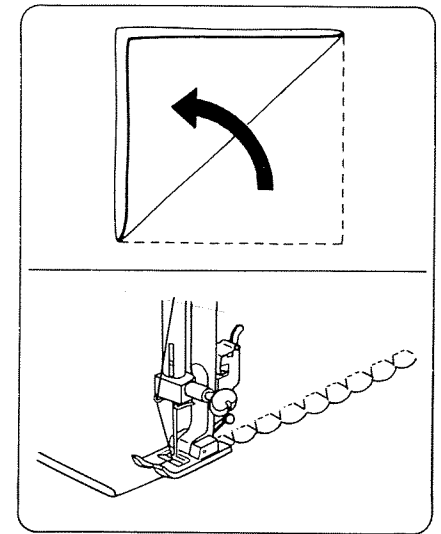
Machine Setting

Machine settings for Shell Tuck:

- Needle: G
- Stitch length: 3 ~ 9
- Stitch width: 4 ~ 6
- Dial 2: 2 ~ 3
- Dial 1: OFF

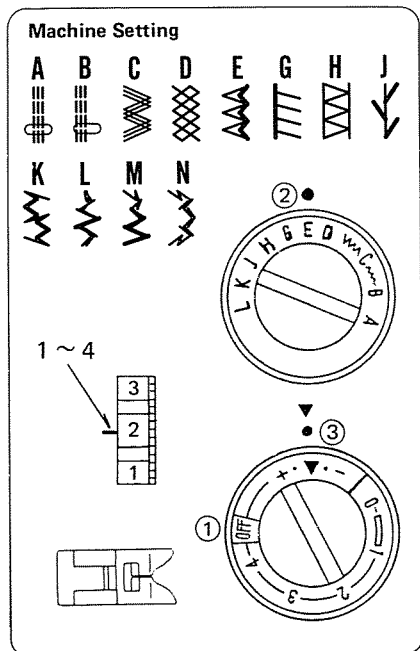
Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial G
- ③ : Stitch length dial 2~3



Place the folded edge along the slot of foot. The needle should fall off the edge of the fabric on the right forming a tuck.

Stretch Stitch Patterns



Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial . . A ~ N
- ③ : Stitch length dial ▼

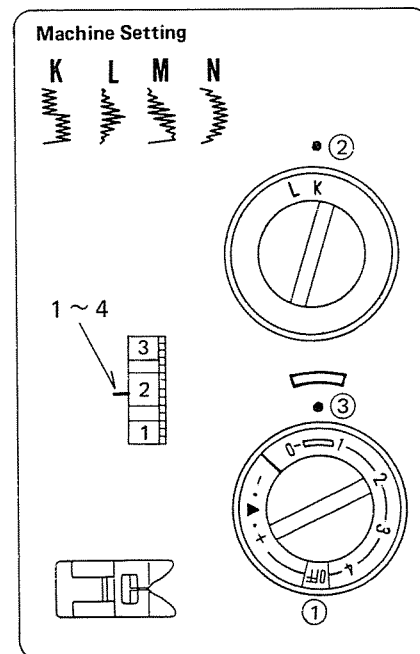
When forward and reverse feeds become unbalanced depending upon the type of fabric, correct the balance by turning the stitch length dial as follows:

When patterns are compressed, correct it by turning the dial toward “+”.

When patterns are drawn out, correct it by turning the dial toward “-”.

(See Page 17)

Decorative Satin Stitch Patterns



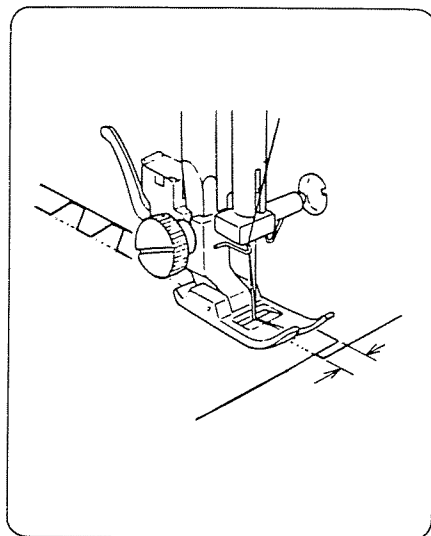
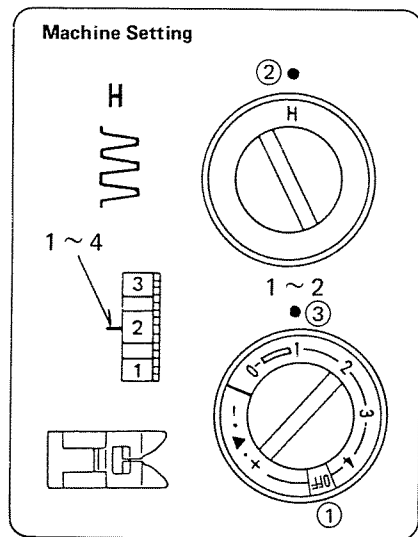
Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial . . K ~ N
- ③ : Stitch length dial ◀

Sew a row of stitches and adjust the thread tension so the upper thread should appear on the reverse side of the fabric.

Test the stitch on the actual fabric for the best results.

Box Stitching



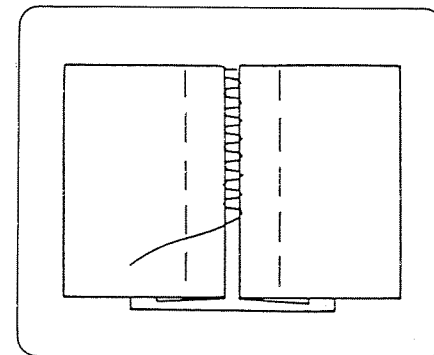
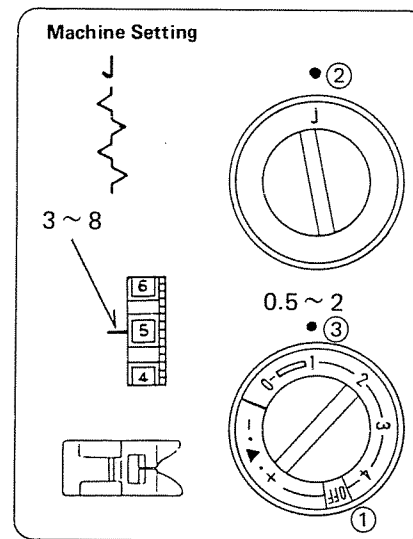
Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial H
- ③ : Stitch length dial 1~2

Use this stitch to join heavy weight interlining.

Overlap two raw edges together and use this stitch to join them.

Fagoting Stitch

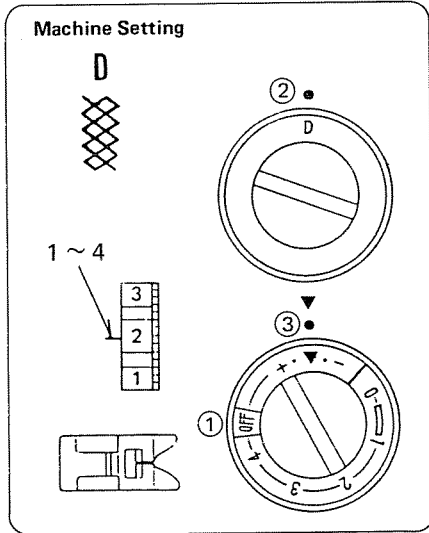


Setting of Dials:

- ① : Stitch length dial OFF
- ② : Pattern selector dial J
- ③ : Stitch length dial 0.5~2

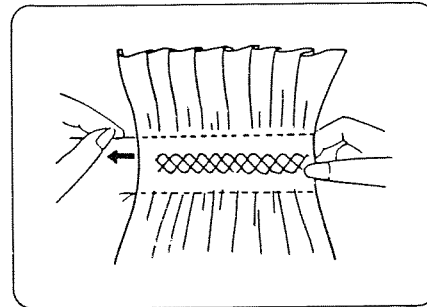
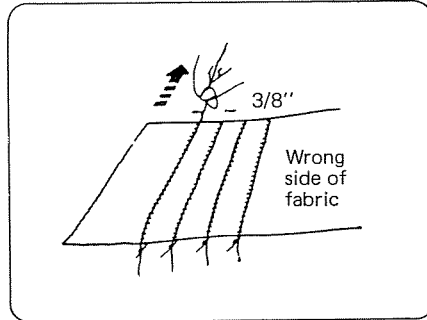
1. Fold under each fabric edge 1.5 cm and press.
2. Pin the two edges to paper or tear-away backing 0.2 to 0.3 cm apart.
3. Sew slowly, guiding the fabric so the needle catches the folded edge on each side.

Smocking



Setting of Dials.

- ① : Stitch length dial OFF
- ② : Pattern selector dial D
- ③ : Stitch length dial ▼

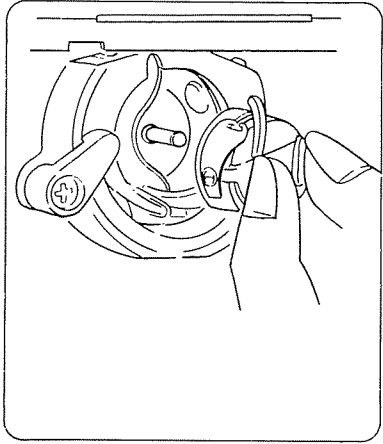


With the stitch length at "4", sew straight stitching lines 3/8" apart across the area to be smocked.

Knot the threads along one edge. Pull the bobbin threads and distribute the gathers evenly. Secure the threads at the other end. Sew the decorative stitch between the gathering stitches. Pull out the gathering stitches.

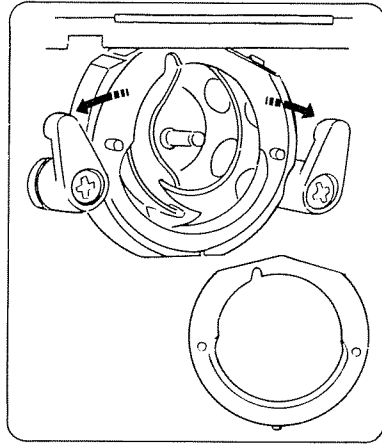
NOTE: Loosen the top thread tension to make gathering easier.

Dismantling and Assembling Hook Race

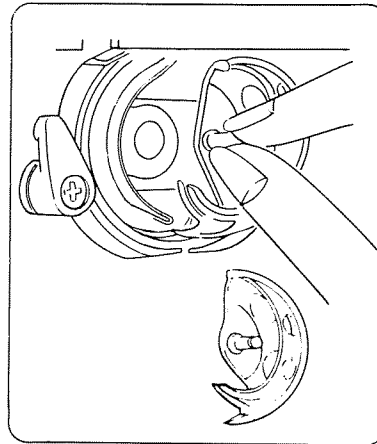


To dismantle hook race:

Raise the needle to its highest position and open the hook cover. Open the hinged latch of bobbin case and take it out of the machine.

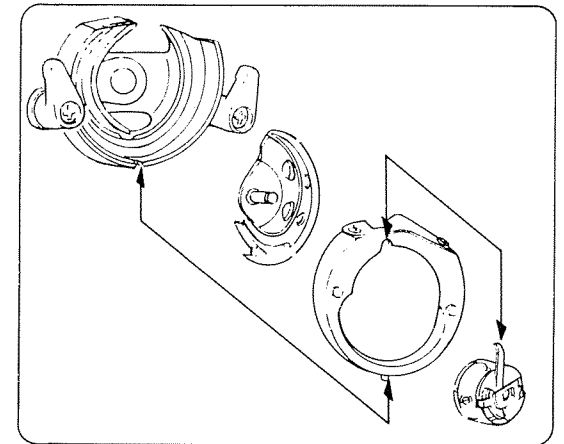


Open the hook race ring holders and remove the hook race ring.



Remove the hook.

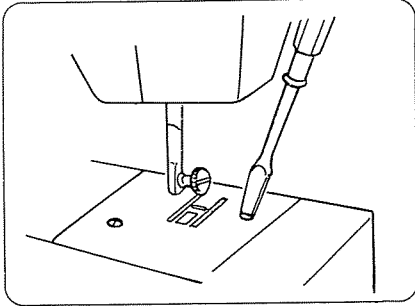
* Clean the hook race with a brush and a soft dry cloth.



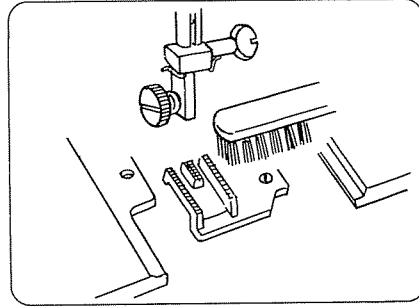
To assemble hook race:

Hold the hook by the center pin and fit it carefully back into the hook race, forming a perfect circle with the shuttle driver. Attach the hook race ring making sure bottom pin fits into the notch. Lock the hook race ring by turning the holders back into position. Insert the bobbin case.

Cleaning the Feed Dogs

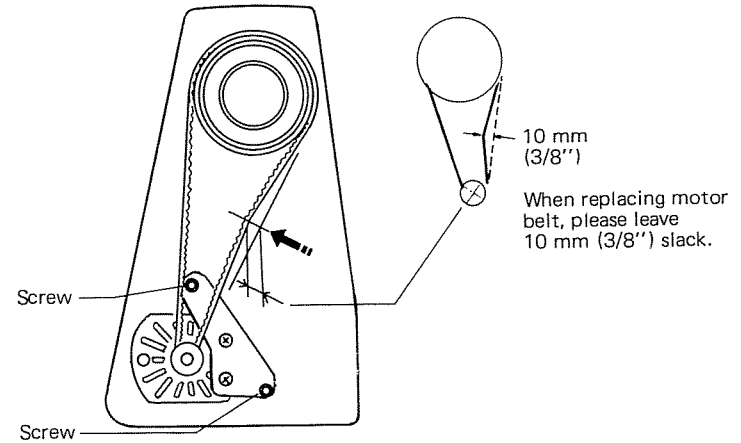


Remove the needle and the presser foot.
Remove the needle plate set screws and remove the needle plate.



With a brush, clean out dust and lint clogging on the feed dog teeth.
Reset the needle plate.

Drive Belt Tension



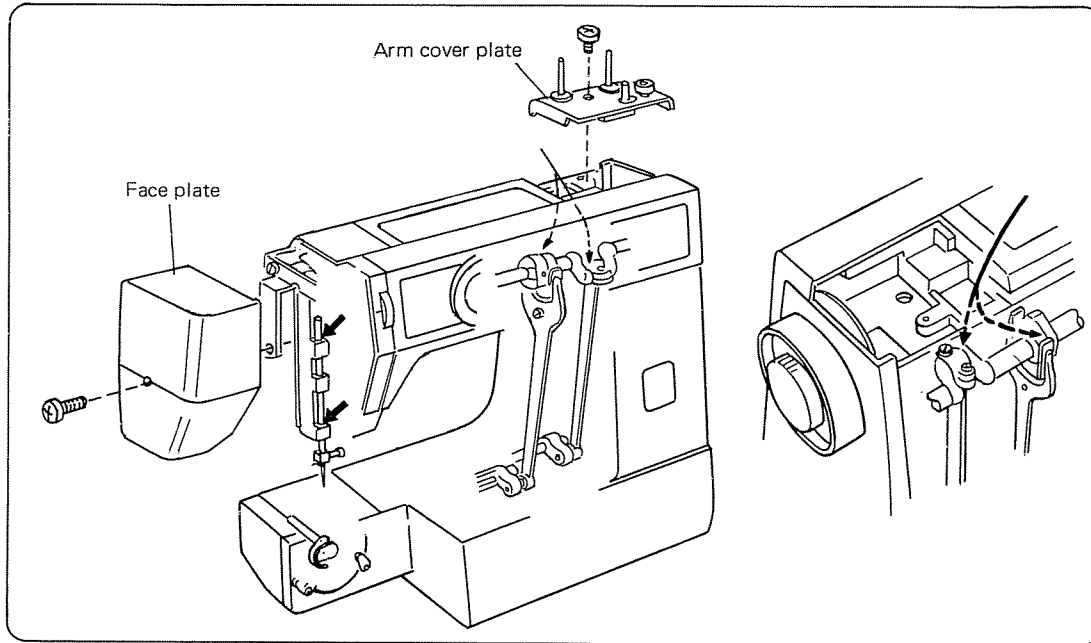
To adjust the belt tension, take off the belt cover and loosen the fixing screws about one turn with a screwdriver.

This will allow the motor to move downward or upward. Then firmly tighten the screw, making sure the belt has the correct tension.

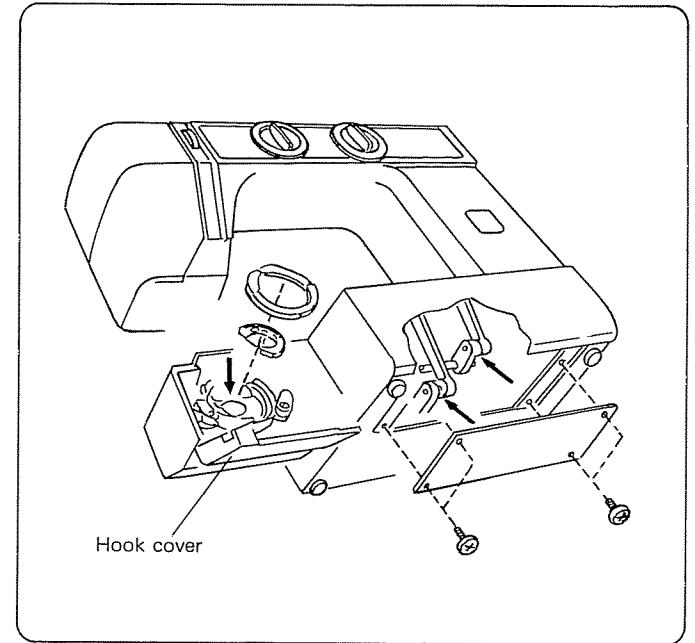
CAUTION: Do not tighten the belt too tightly.

Oiling the Machine

- Oil behind the Face Plate and under the Arm Cover Plate



- Oil the Underside



Apply a few drops of fine quality sewing machine oil to the points indicated by the arrows in the figures.

For a machine in constant use, oil two or three times a year.

In case the machine does not work smoothly due to standing idle for some time, apply a few drops of kerosene at the oiling points, and run the machine rapidly for a minute.

Before oiling, wipe off the oiling points.

Trouble Shooting

Condition	Cause	Reference
<p>The machine does not run smoothly and is noisy.</p>	<ol style="list-style-type: none"> 1. Threads have been caught in hook mechanism. 2. The feed dog is packed with lint. 	<p>See Page 33 See Page 34</p>
<p>The needle thread breaks.</p>	<ol style="list-style-type: none"> 1. The needle thread is not threaded properly. 2. The needle thread tension is too tight. 3. The needle is bent or blunt. 4. The needle is incorrectly inserted. 5. The fabric is not being drawn to the back when sewing is finished. 6. The thread is either too heavy or too fine for the needle. 	<p>See Page 13 See Page 15 See Page 8 See Page 8 See Page 19 See Page 8</p>
<p>The bobbin thread breaks.</p>	<ol style="list-style-type: none"> 1. The bobbin thread is not threaded properly in the bobbin case. 2. Lint has collected in the bobbin case. 3. The bobbin is damaged and doesn't turn smoothly. 	<p>See Page 12 Clean the bobbin case. Exchange bobbin.</p>
<p>The needle breaks.</p>	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle clamp screw is loose. 4. The tension of the needle thread is too tight. 5. The fabric is not drawn to the back when sewing is finished. 6. The needle is too fine for the fabric being sewn. 7. The pattern selector dial has been turned while the needle was in the material. 	<p>See Page 8 See Page 8 See Page 8 See Page 15 See Page 19 See Page 8 See Page 16</p>
<p>Skipped stitches</p>	<ol style="list-style-type: none"> 1. The needle is incorrectly inserted. 2. The needle is bent or blunt. 3. The needle and/or threads are not suitable for the work being sewn. 4. A BLUE TIPPED needle is not being used for sewing stretch, very fine fabrics and synthetics. 5. The needle thread is not threaded properly. 	<p>See Page 8 See Page 8 See Page 8 See Page 8 See Page 13</p>

Condition	Cause	Reference
Seam Puckering	<ol style="list-style-type: none"> 1. The needle thread tension is too tight. 2. The machine is not threaded correctly. 3. The needle is too heavy for the cloth being sewn. 4. The stitches are too coarse for the fabric being sewn. <p>* When sewing extremely light weight materials, place a sheet of paper underneath the fabric.</p>	<p>See Page 15 See Page 13 See Page 8 Make the stitches denser.</p>
Stitches form loops below the work.	<ol style="list-style-type: none"> 1. The needle thread tension is too loose. 2. The needle is either too heavy or too fine for the thread. 	<p>See Page 15 See Page 8</p>
The cloth is not feeding smoothly.	<ol style="list-style-type: none"> 1. The feed dog is packed with lint. 2. The stitches are too fine. 	<p>See Page 34 Make the stitches coarser.</p>
The machine does not work.	<ol style="list-style-type: none"> 1. The machine is not plugged in. 2. A thread is caught in the hook race. 3. Clutch knob is disengaged for the bobbin winding. 	<p>See Page 5 See Page 33 See Page 10</p>
The buttonhole stitches are not balanced.	<ol style="list-style-type: none"> 1. The stitch length is not suitable for the fabric being sewn. 2. The work is being pulled or held back. 	<p>See Page 17 Do not force the fabric for guiding.</p>

